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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,440	09/05/2003	Veshaal Singh	50277-2209	8474
29989	7590	08/08/2006	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP			PATEL, MANGLES M	
2055 GATEWAY PLACE			ART UNIT	
SUITE 550			PAPER NUMBER	
SAN JOSE, CA 95110			2178	

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/656,440	SINGH, VESHAAL	
	Examiner	Art Unit	
	Manglesh M. Patel	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This **FINAL** action is responsive to the amendment filed on May 12, 2006.
2. Claims 1-32 are pending. Claims 1 and 17-32 are independent claims.

Withdrawn Objections

3. The Objection to the specification has been withdrawn in light of the amendment.
4. The objection to claims 17-32 has been withdrawn in light of the amendment.

Withdrawn Rejections

5. The 35 U.S.C. 101 rejection of claims 1-16 has been withdrawn in light of the amendment.
6. The 35 U.S.C. 102(e) rejections of claims 1-32 with cited reference of Lau U.S. Pub 2002/0184213 has been withdrawn in light of the amendment.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lau (U.S. Pub 2002/0184213, filed April 25, 2002) in view of Vedula (U.S. 6,823,495, filed Sep 14, 2000).

Regarding Independent claims 1, Lau teaches a computer-implemented method for generating a mapping scheme, the method comprising: Receiving commands from a user, wherein said commands establish a mapping between one or more attributes of a source and one or more attributes of a target (paragraphs 13-17 & 52 & abstract, wherein user input is received to establish a mapping between one or more attributes of source and target); *Based on said commands, automatically generating a mapping scheme that represents said mapping, wherein said mapping includes at least one of multiple attributes of said source mapped to a single attribute of said target* (paragraphs 13-17 & 52 & abstract, wherein more than one attribute of source or target is mapped to a single attribute of either); *Multiple attributes of said target mapped to a single*

attribute of said source (paragraphs 52 & 64, wherein more than one attribute of source or target is mapped to a single attribute of either). Lau teaches transforming data conforming from a source data to a target data using a mapping to generate a transformation script (paragraph 14). Lau describes mapping between data elements or **attributes** (paragraph 52). Lau describes that the mapping are between a source tree fragments to a target file that includes attributes (paragraph 79). Although a typical XML document is structured therefore including a hierarchical level of nodes and child nodes with different depths that comprise a tree fragment, Lau doesn't explicitly teach the mapping between the hierarchies of depths. Vedula teaches Wherein a plurality of attributes of said source are related to each other according to a first hierarchy that includes multiple hierarchical levels (Fig 1, column 9, lines 1-55, wherein source objects shown as attributes on figure 3C include a hierarchy that includes multiple levels, for example 18a and 18 b of figure 1); Wherein a plurality of attributes of said target are related to each other according to a second hierarchy that includes multiple hierarchical levels (Fig 1 & 3c, column 9, lines 1-55, wherein the target also includes a multiple hierarchy of levels); Wherein said commands establish, in said mapping, that a particular hierarchical level of said source is mapped to a particular hierarchical level of said target, wherein said particular hierarchical level of said source is at different depth, within said first hierarchy, than the depth of said particular hierarchal level of said target within said second hierarchy (Fig 1 & 3c, column 9, lines 1-55, wherein the mappings include different depths); Lau and Vedula are analogous art because they both describes methods for generating a mapping scheme. At the time of the invention it would have been obvious to one of ordinary skill in the to have included mapping between hierarchal depths. The motivation for doing so would have been to prevent the restriction for mapping source and target attributes by allowing mapping between different hierarchal depths, thereby improving mapping operation between attributes.

Regarding Dependent claims 2 and 18, Lau discloses *using said mapping scheme to create an electronic document with data from said source, wherein the electronic document has a particular format dictated by a target data definition* (paragraphs 14, 47, 52 & 94).

Regarding Dependent claims 3 and 19, Lau discloses *using said mapping scheme to store, into said target, data from an electronic document, wherein the electronic document has a particular format dictated by a source data definition* (paragraphs 14, 47, 52 & 94).

Regarding Dependent claims 4 and 20, Lau discloses *wherein said mapping scheme further includes instructions on how to collapse a number of attributes of said source into a smaller number of attributes of said target* (paragraph 44).

Regarding Dependent claim 5 and 21, Lau discloses *wherein said mapping scheme further includes instructions on how to expand a number of attributes of said source to a greater number of attributes of said target* (paragraph 44).

Regarding Dependent claims 6 and 22, Lau discloses wherein:

- *The step of receiving commands from a user includes receiving user input that specifies a condition, and an action associated with the condition* (paragraph 85); and
- *The method further comprises the steps of performing an operation that includes converting data, based on said mapping scheme, from the source to a format associated with the target* (paragraph 85);
- *During performance of said operation, performing the steps of determining whether the condition is satisfied* (paragraph 85); and
- *If the condition is satisfied, then performing said action* (paragraph 85).

Regarding Dependent claims 7 and 23, Lau discloses wherein:

- *The step of receiving commands from a user includes receiving user input that specifies a specific set of instructions* (paragraph 85); and
- *The method further comprises the steps of performing an operation that includes converting data, based on said mapping scheme, from the source to a format associated with the target* (paragraph 85); and
- *During performance of said operation, executing the specific set of instructions to affect said operation* (paragraph 85).

Regarding Dependent claims 8 and 24, Lau discloses wherein:

- *The step of receiving commands from a user includes receiving user input that declares a variable to which values can be assigned* (Paragraphs 48, 45, 49, 51 and 53);

- *The method further comprises the steps of performing an operation that includes converting data, based on said mapping scheme, from the source to a format associated with the target (Paragraphs 48, 45, 49, 51 and 53); and*
- *During performance of said operation, using said variable (Paragraphs 48, 45, 49, 51 and 53).*

Regarding Dependent claims 9 and 25, Lau discloses wherein:

- *The step of receiving commands from a user includes receiving user input that specifies a precompiled routine (Paragraphs 48, 45, 49, 51 and 53); and*
- *The method further comprises the steps of performing an operation that includes converting data, based on said mapping scheme, from the source to a format associated with the target (Paragraphs 48, 45, 49, 51 and 53); and*
- *During performance of said operation, calling said precompiled routine to affect said operation (Paragraphs 48, 45, 49, 51 and 53).*

Regarding Dependent claims 10 and 26, Lau discloses:

- *Reading source data definition that includes information about said plurality of attributes of said source (abstract & paragraphs 12-16);*
- *Reading target data definition that includes information about said plurality of attributes of said target (abstract & paragraphs 12-16);*
- *Based on said source data definition and said target data definition, presenting to said user an interface that identifies said plurality of attributes of said source and said plurality of attributes of said target (paragraphs 59-61);*
- *Wherein said step of receiving commands from said user interface is performed by receiving said commands through said interface (paragraphs 59-61).*

Regarding Dependent claims 11 and 27, Lau discloses wherein said mapping scheme includes instructions on how to collapse a number of hierarchical levels of said source into a smaller number of hierarchical levels of said target (paragraphs 79 & 83).

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Regarding Dependent claims 12 and 28, Lau discloses *wherein said mapping scheme includes instructions on how to expand a number of hierarchical levels of said source to a greater number of hierarchical levels of said target* (paragraphs 79 & 83).

Regarding Dependent claims 13 and 29, Lau discloses *wherein at least one of the source and the target is a database* (paragraphs 67 & 69).

Regarding Dependent claims 14 and 30, Lau discloses *wherein at least one of the source and the target is an XML document* (paragraphs 67 & 69).

Regarding Dependent claims 15 and 31, Lau discloses *wherein said source is one of a database and an XML document and the target is the other of a database and an XML document* (paragraphs 67 & 69).

Regarding Dependent claims 16 and 32, Lau discloses *wherein the source is a first XML document and the target is a second XML document* (paragraphs 67 & 69).

Regarding Dependent claim 17, with dependency of claim 1, the claim describes a computer readable medium performing the method of claim 1 and is therefore rejected under the same rationale.

It is noted that any citation **[[s]]** to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. **[[See, MPEP 2123]]**

Response to Arguments

9. Applicant's arguments filed May 12, 2006 have been fully considered but are moot in view of the new grounds of rejection.

Conclusion

Other Prior Art Cited

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10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Fernandez et al. (U.S. 6,604,100) discloses "Method For Converting Relational Data Into A Structured Document"

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manglesh M. Patel whose telephone number is (571) 272-5937. The examiner can normally be reached on M, W 6 am-3 pm T, TH 6 am-2pm, Fr 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manglesh M. Patel
Patent Examiner
July 31, 2006



CESAR PAULA
PRIMARY EXAMINER